IRPA'S CONTRIBUTION TO E&T ACTIVITIES FOR RADIATION PROTECTION PROFESSIONALS

E. GALLEGO[1], A. HEFNER[2]
IRPA Executive Council

[1]Nuclear Engineering Department, Universidad Politécnica de Madrid
José Gutiérrez Abascal, 2, E-28006 Madrid – Spain

[2]Head of Radiation Expert Group, Health Physics Division, AIT Austrian Institute of Technology GmbH
A-2444 Seibersdorf - Austria

ABSTRACT

The International Radiation Protection Association (IRPA) promotes excellence in the practice of radiation protection through national and regional Associate Societies for radiation protection professionals. IRPA has recently prepared and E&T Plan structured around three main lines: the cooperation with international and regional organizations dealing with E&T in Radiation Protection; the internal stimulation of E&T by organizing discussion forums during IRPA Congresses; and the stimulation and support to the organization of E&T activities either by IRPA or by its Associate Societies. The main innovations are in the possibility of undertaking common activities by two or more Associate Societies; the promotion of E&T networks sharing language or regional proximity; and the emergence of activities to attract young generations to the profession.

1. Introduction

The International Radiation Protection Association (IRPA) is the international voice of the radiation protection profession. It promotes excellence in the practice of radiation protection through national and regional Associate Societies for radiation protection professionals by providing benchmarks of good practice and enhancing professional competence and networking.

One of the main strategic goals of IRPA is to promote excellence in radiation protection professionals. To reach that objective, IRPA has started the development of guidance documents for use by radiation protection professionals and Associate Societies. The first topic addressed has been stakeholder engagement and currently new guiding documents are being developed on radiation protection culture and on professional qualification.

Education and Training (E&T) is another key to reach professional excellence, and its essential role has been recognized since the beginning of IRPA. However, there is still a wide variation between different countries with regard to E&T methods as well as certification and recognition systems for radiation protection professionals and the desirable harmonization is still to come.

1.1 Radiation Protection Expert

The IRPA Executive Council (EC) has widely discussed on these issues and a position paper [1] was presented at a previous ETRAP Conference six years ago. Since then, an important milestone has been the recognition by the International Labour Organization of Radiation Protection Expert (RPE) within the International Standard Classification of Occupations

(ISCO-08; 2263) [2]. RPE is included in the group of occupations covered by the definition of Environmental and occupational health and hygiene professionals.

The IRPA definition of RPE is very relevant in this context. According to IRPA, the RPE is a person:

> having education and/or experience equivalent to a graduate or masters degree from an accredited college or university in radiation protection, radiation safety, biology, chemistry, engineering, physics or a closely related physical or biological science; and
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> who has acquired competence in radiation protection, by virtue of special studies, training and practical experience. Such special studies and training must have been sufficient in the above sciences to provide the understanding, ability and competency to
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> anticipate and recognize the interactions of radiation with matter and to understand the effects of radiation on people, animals and the environment;
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> evaluate, on the basis of training and experience and with the aid of quantitative measurement techniques, the magnitude of radiological factors in terms of their ability to impair human health and well-being and damage to the environment;
>
> develop and implement, on the basis of training and experience, methods to prevent, eliminate, control, or reduce radiation exposure to workers, patients, the public and the environment.

In most countries the competence of radiation protection experts needs to be recognized by the competent authority in order for these professionals to be eligible to undertake certain defined radiation protection responsibilities. The process of recognition may involve formal certification, accreditation, registration, etc.

2. IRPA E&T Plan for 2008-20

Given the differences existing between countries with regard to certification and accreditation and the nature of IRPA as association of national and regional professional societies, the IRPA EC is developing an E&T Plan that aims towards promoting, supporting, providing guidance and networking to the E&T activities organized by the Associate Societies individually or, preferably, in cooperation.

IRPA Societies are not universities and their E&T activities are not intended for an academic diploma but for professional enhancement. These activities generally focus on general Radiation Protection trends and/or on very specialized topics which cannot be covered by other organizations.

Taking these facts into account, the IRPA E&T Plan is structured around three main lines:

- The cooperation with international and regional organizations dealing with E&T in Radiation Protection;
- the internal stimulation of E&T by organizing discussion forums during IRPA Congresses; and
- the stimulation and support of E&T activities organized by the Associate Societies.

2.1 Cooperation with International and Regional Organizations

IRPA is a main stakeholder representing the profession views on E&T needs in radiation protection for both basic levels and continuous professional enhancement. Consequently,

IRPA is maintaining cooperation with the IAEA, the European Commission and the American Academy of Health Physics, amongst others.

IAEA is currently implementing a “Strategic Approach to Education and Training in Radiation and Waste Safety”, aimed at establishing sustainable education and training programmes in Member States [3]. In order to advise on policy development, the maintenance of the Agency’s training programme and the monitoring of the long term action plan, IAEA created in 2002 the “Steering Committee on Education and Training in Radiation Protection and Waste Safety” with nominated members representing regional, collaborating training centres, the European Union and Professional organizations (IRPA). As observer in the Steering Committee, IRPA is contributing to the implementation of the IAEA strategic plan on E&T by exchanging information on actual projects and developments with the Associate Societies.

Giving the great opportunity to interact with the main stakeholders on E&T, IRPA representatives are regularly attending the ETRAP (International Conference on Education and Training in Radiological Protection) Conference series, organized by the European Nuclear Society. This participation will hopefully continue in the next editions after ETRAP 2009.

In the European Union, the draft of the modified Basic Safety Standards Directive highlights the importance of education and training by dedicating a specific title to “requirements for radiation protection education, training and information” [4]. The European Radiation Protection Training and Education Platform (EUTERP) has been created with the main objective of removing obstacles for the mobility of radiation protection experts within the EU through harmonisation of criteria and qualifications for and mutual recognition of such experts. The ENETRAP II project (European Network on Education and Training in RAdiological Protection, FP7-EURATOM), which runs in 2009-2012 aims to develop European high-quality "reference standards" and good practices for E&T in radiation protection, specifically with respect to the RPE and the Radiation Protection Officer (RPO) [5]. These networks could have a clear role to recognize RPE from countries that do not have their own recognition system. IRPA has been collaborating in the past with these EU initiatives as observer, and contributed to the development of the definitions of RPE and RPO. Looking to the future, it would be good if IRPA could continue playing an advisory role. The European Associate Societies, which held annual informal meetings, can provide the EU networks with essential feedback from the professional perspective and IRPA can facilitate to establish the adequate mechanisms.

In the United States of America, the American Academy of Health Physics (AAHP) is an organization that advances the profession of Health Physics, encourages the highest standards of ethics and integrity in the practice of Health Physics, enhances communications among Certified Health Physicists (CHP) and provides a means for Active CHPs to participate in the certification program. The AAHP accredited the training activities (refresher courses and seminars) organized as part of the IRPA 12 international congress in 2008 and also assigned credits valid for recertification (continuing education programme) to the participants requesting them. This very positive experience is encouraging and IRPA will try to establish a memorandum of understanding with AAHP for a permanent collaboration.

2.2 Discussion forums at IRPA congresses.

Over the last years it has proved very successful to organise an Associate Societies’ forum at all IRPA regional and international congresses. E&T is regularly scheduled to be one subject for discussion: this is a going on action.

The IRPA EC will check that these discussion meetings on E&T activities are maintained, either embedded or separated from the Associate Societies Forums, as a way to exchange

experiences, promote the harmonization of the definition of RPE according to IRPA and encourage the organization of common and new E&T activities as well as to stimulate to an active participation in the actions proposed in the IRPA E&T Plan, which are described in the following paragraph.

2.3 Actions on E&T

IRPA has already a long tradition in organizing Refresher courses at IRPA congresses. These are lectures by specialists in which updated information on a very precise topic is offered. The IRPA 12 Congress included 20 Refresher Courses, and also 3 Seminars in which different topics of a theme were addressed by a team of experts. The E&T Plan looks forward to maintain these activities and to reinforce them by, specifically:

- including Refresher Courses and Seminars within each IRPA Congress (already established in the guidance for IRPA congresses organization);
- implementing an evaluation and follow-up procedure for the Refresher Courses and Seminars, based on questionnaires to be fulfilled by the participants;
- exploring the live Internet transmission of the IRPA 13 Refresher Courses; and
- improving the post-congress accessibility at the IRPA website to texts and presentations from the Refresher Courses and Seminars (including those from IRPA Regional Congresses).

IRPA Associate Societies frequently organize specific training events, such as seminars, short courses and summer (or winter) schools on specialized topics. These activities are somehow unconnected, and there is an intention in the E&T Plan to promote good coordination. First of all, a questionnaire is going to be distributed to have a complete picture. Then, IRPA sponsoring would be granted to those activities which clear and openly look for professional enhancement within the IRPA family. Specific actions that should be undertaken by the organizing societies to get the “IRPA stamp” can be the following (from easier to harder implementation):

- Advertisement and promotion through IRPA and the Associate Societies.
- Availability of grants for young professionals to facilitate their participation (usually to young members of the organizing societies or from developing countries).
- Agreement to share and exchange teaching materials (by, for instance opening of internet spaces at the IRPA website).
- Webcast of lectures and courses previously recorded.
- Interactive participation via live Internet transmission in courses or seminars (“webinars”).

The IRPA E&T Plan also considers other actions, some of them innovative, to stimulate E&T activities at different levels, like the following:

- Promote the creation of “E&T networks” within IRPA, for instance by those societies sharing language (e.g. Latin-American societies together with Spain and Portugal) or belonging to the same region (e.g. European Radiation Protection Young Scientists Exchange Network, with pilot project for schools and universities with participation from OVS, FS, SFRP, NVS, NSRP and SRP), with dedicated spaces in the IRPA website.
- Encourage Associate Societies activities at national or regional scale to attract young generations to the profession: examples are emerging in some countries to engage pre-university and undergraduate students. Awards programmes to individual or collective work in schools or universities could be an effective way.
- Attract young professionals to IRPA Congresses by initiatives like the National and European Awards for young scientists (the IRPA European Societies will give a first award at the IRPA European Regional Congress in Helsinki in 2010).
- Provide backup and establish interaction with International Training Centres or the World Nuclear University.

3. Conclusions

The IRPA E&T Plan 2008-2020 will continue the cooperation with international and regional organizations dealing with E&T in Radiation Protection where IRPA is representing the profession views. The continuous interaction between the Associate Societies to cooperate in E&T will continue at different levels, in particular at the discussion forums organized during IRPA Congresses. The Plan also aims to stimulate and support the Associate Societies to organize coordinated activities; to share E&T resources; to create E&T networks sharing language or regional proximity; and to organize activities to attract young generations to the profession.

4. References

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